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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,615	03/01/2004	Ian Charles Matthews	50N3215.01	8847
27774 7590 06/08/2009 MAYER & WILLIAMS PC 251 NORTH AVENUE WEST 2ND FLOOR WESTFIELD, NJ 07090			EXAMINER DANG, HUNG Q	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 06/08/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/790,615

**Applicant(s)**

MATTHEWS ET AL.

**Examiner**

Hung Q. Dang

**Art Unit**

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-18, 20, 21 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-18, 20-21, and 23-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

Applicant's arguments filed 04/22/2009 have been fully considered but they are not persuasive.

On pages 7-8, Applicant argues that, Kostreski does not disclose the feature of "converting digital signals in a format different than the desired format." In response, the Examiner respectfully submits that although Kostreski does not explicitly disclose such a feature, one of ordinary skill in the art would recognize that it is obvious to modify the teachings of Kostreski et al. to also receive non-MPEG digital signals. Note that the desired format disclosed by Kostreski is an MPEG format (see Fig. 6; column 13, line 64 - column 14, line 10; column 15, lines 25-34). The method of Kostreski, as disclosed, can receive and digitize analog signals before encoding the digitized signals according to an MPEG format. Clearly, if program signals that have been digitized are received from the input, the digitization steps can be bypassed and the method can broadcast program signals that have been digitized as well. The utility of the method would be enhanced accordingly.

Also on page 7, Applicant argues that Kostreski does not disclose the feature of "demultiplexing the third signal in the desired format, having an audio component and a video component." In response, the Examiner respectfully disagrees. In column 15, lines 30-32, Kostreski discloses the third signals are MPEG encoded signals. In column 14, lines 44-49, Kostreski discloses such MPEG signals are separated into video PES stream and audio PES stream before these PES streams are combined with PES

streams from other sources into a super transport stream. Obviously, the separation of the MPEG input stream into video and audio PES streams is in fact the demultiplexing of the third stream.

Also on page 7, Applicant argues Kostreski fails to disclose a single source interface. In response, the Examiner respectfully disagrees. Kostreski clearly discloses a set of inputs where a plurality of signals are received as shown in Fig. 6. This set of inputs belongs to an input interface. Note that an input interface can have a plurality of inputs, each of which receives a corresponding signal of certain format. Such an input interface obviously is the "single source interface". The Examiner respectfully submits further that a single source interface in general is not necessarily equivalent to the "single device," which was originally recited in now cancelled claim 19. Additionally, the first signal, the second signal, and the third signal are now recited as input signals received at an input interface. At least for these reasons, the Examiner finds that amended claim 14 has newly added features that are not incorporated from now cancelled claim 19.

For ongoing reasons, the amended claims do not overcome the cited prior art. Also a new ground of rejection is necessitated by such amendments.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 14-15, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kostreski et al. (US Patent 5,559,808).**

Regarding claim 14, Kostreski et al. disclose a method for processing a plurality of signals (column 13, line 46 – column 14, line 12; column 15, lines 25-35), comprising: receiving a plurality of signals, having a plurality of different formats, at a single source interface, wherein at least a first, a second signal and a third signal are received at said single source interface (Fig. 6; column 13, lines 57-63; column 14, lines 1-10; column 15, lines 25-34); routing the first signal, the second signal and the third signal from the single source interface to one or more selected devices (Fig. 6; column 13, lines 57-63; column 14, lines 1-10; column 15, lines 25-34); converting the first signal, routed from the single source interface, said first signal being an analog signal to a desired format (column 13, lines 57-63; column 14, lines 1-10); converting the second signal, routed from the single source interface, to the desired format (column 13, lines 57-63; column 14, lines 1-10); demultiplexing the third signal in the desired format, said third signal having an audio component and a video component (column 14, lines 43-49; column 15, lines 25-35); packetizing the first, second and third signals (column 14, lines 50-52); and multiplexing the first, second and third signals into a single transport stream (column 14, lines 46-49).

However, Kostreski et al do not disclose the second signal being a digital signal having a format different from the desired format. But Kostreski et al. disclose the desired format is an MPEG II format (Fig. 6; column 13, line 64 - column 14, line 10; column 15, lines 25-34).

Official Notice is taken that receiving and converting a digital signal into an MPEG II format has been well known in the art.

It would have been obvious to modify the teachings of Kostreski et al. to also receive non-MPEG II digital signals. Such a modification of Kostreski et al. can enhance the input interface of the method because it can broadcast program signals that have been digitized.

Regarding claim 15, Kostreski et al. also disclose storing the single transport stream (column 14, lines 46-59).

Claim 21 is rejected for the same reason as discussed in claim 14 above.

Claim 23 is rejected for the same reason as discussed in claim 15 above.

**Claims 16 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kostreski et al. (US Patent 5,559,808) as applied to claims 14-15, 21, and 23 above, and further in view of Jung et al. (US Patent 6,301,248).**

Regarding claim 16, see the teachings of Kostreski et al. as discussed in claim 14 above. However, Kostreski et al. do not disclose buffering the first, second, and third signals prior to the packetizing.

Jung et al. disclose buffering first, second, and third signals prior to packetizing (column 3, lines 59-67; column 4, line 37 – column 5, line 25).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the buffering step disclosed by Jung et al. into the method disclosed by Kostreski et al. to simplify an interface between the encoders and the transport stream (Jung et al., column 1, lines 34-41).

Claim 25 is rejected for the same reason as discussed in claim 16 above.

**Claims 17-18 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kostreski et al. (US Patent 5,559,808) as applied to claims 14-15, 21, and 23 above, and further in view of Joung et al. (US Patent 5,555,097).**

Regarding claim 17, see the teachings of Kostreski et al. as discussed in claim 14 above. Further, Kostreski et al. also disclose converting the analog signal in a predetermined format to a digital signal; and encoding the digital signal (column 14, lines 6-12).

However, Kostreski et al. do not disclose demodulating the analog signal and decoding the analog signal to a predetermined format.

Joung et al. disclose demodulating the analog signal and decoding the analog signal to a predetermined format (column 3, lines 40-50).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the steps of demodulating and decoding disclosed by Joung et al. into the method disclosed by Kostreski et al. because these steps are known in the art as necessary for digitizing of the analog signals correctly.

Regarding claim 18, Kostreski et al. also disclose the desired format comprises an MPEG format (column 13, line 64 – column 14, line 8).

Claim 26 is rejected for the same reason as discussed in claim 17 above.

Claim 27 is rejected for the same reason as discussed in claim 18 above.

**Claims 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kostreski et al. (US Patent 5,559,808) as applied to claims 14-15, 21, and 23**

**above, and further in view of Ro (US Patent 5,999,690) and Torri et al. (US Patent 4,712,175).**

Regarding claim 20, see the teachings of Kostreski et al. as discussed in claim 14 above. However, Kostreski et al. do not disclose a selector to select an analog signal, a digital signal and the third signal from among the plurality of signals.

Ro disclose a selector to select a signal from among the plurality of signals (Fig. 1).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the selector disclosed by Ro into the method disclosed by Kostreski et al. in order to share processing resources for economic reasons.

However, the proposed combination of Kostreski et al. and Ro does not disclose the selector to select an analog signal, a digital signal and the third signal.

Torri et al. disclose a selector comprising three independent selectors to provide three independent outputs (Fig. 6).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings by Torri et al. into the method disclosed by Kostreski et al. and Ro so that signal inputs can be grouped into different categories depending on format and nature of the signals in order to share processing resources more efficiently.

Claim 24 is rejected for the same reason as discussed in claim 20 above.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/  
Examiner, Art Unit 2621

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